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Abstract

A system and method for configuring a reconfigurable I/O (RIO) device to perform a function in response to user requirements. A graphical user interface program receives user input specifying a function. A configuration generation program generates a hardware configuration program based on the user input. The hardware configuration program is usable to configure a device to perform the function, where the device includes a programmable hardware element and one or more fixed hardware resources coupled to the programmable hardware element. The hardware configuration program is deployable onto the programmable hardware element and specifies usage of the fixed hardware resources by the programmable hardware element in performing the function. The GUI program is further executable to display icons on a display corresponding to at least a subset of the fixed hardware resources, and to modify an appearance of respective fixed hardware resource icons as the corresponding fixed hardware resources are allocated.